



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : SOPHIE ET AL. )  
 App. No. : 09/975,466 )  
 Filed : October 9, 2001 )  
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 Examiner : Kielin, E. )

Group Art Unit 2813

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INFORMATION DISCLOSURE STATEMENT

United States Patent and Trademark Office  
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Dear Sir:

Enclosed is form PTO-1449 listing 11 references that are also enclosed. Applicants believe no fee is due because these references were originally cited in an Information Disclosure Statement that was filed before the receipt of a first Office Action on the merits (37 C.F.R. § 1.97(b)(3)). However, if a fee is due, the Commissioner is authorized to charge the fee set forth in 37 C.F.R. § 1.17(p) to Deposit Account No. 11-1410.

Applicants are unable to provide a date of publication for reference publication numbers 1 (SOI Technology, IBM's Next Advance in Chip Design) and 7 (slides from Sundani et al. "Oral Presentation of Dual Damascene Process"). For the purposes of examination, the Examiner is requested to assume that these publications predate the filing of the present application by more than one year.

Respectfully submitted,

KNOBBE, MARTENS, OLSON &amp; BEAR, LLP

Dated: January 10, 2003By: 

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FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
ASMMC.036AUSAPPLICATION NO.  
09/975,466INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT

(SEE SEVERAL SHEETS IF NECESSARY)

APPLICANT  
SOPHIE et al.FILING DATE  
October 9, 2001GROUP  
2812

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EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
✓1.	SOI Technology: IBM's Next Advance In Chip Design. Date unknown.
✓2.	Fukuzumi, Y. et al., "Liner-Supported Cylinder (LSC) Technology to realize Ru/Ta <sub>2</sub> O <sub>5</sub> /Ru Capacitor for Future DRAMs," <u>IEEE, IED 2000, Session 34</u> (2000).
✓3.	Hones, P. et al., "MOCVD of Thin Ruthenium Oxide Films: Properties and Growth Kinetics," <u>Chem. Vap. Deposition</u> , Vol. 6, No. 4, pp. 193-198 (2000).
✓4.	Inoue, N. et al., "Low thermal-budget fabrication of sputtered-PZT capacitor on multilevel interconnects for embedded FeRAM," <u>IEEE, IED 2000, Session 34</u> (2000).
✓5.	Jung, D. et al., "A Novel Ir/IrO <sub>2</sub> /Pt-PZT-Pt/IrO <sub>2</sub> /Ir Capacitor for A Highly Reliable Mega-Scale FRAM," <u>IEEE, IED 2000, Session 34</u> , (2000).
✓6.	Solanki R. et al., "Atomic Layer Deposition of Copper Seed Layers," <u>Electrochemical and Solid-State Letters</u> , Vol. 3, No. 10, pp. 479-480 (2000).
✓7.	Sundani et al., "Oral presentation of dual damascene process, slides.
✓8.	Utriainen, M. et al., "Studies of metallic thin film growth in an atomic layer epitaxy reactor using M(acac) <sub>2</sub> (M = Ni, Cu, Pt) precursors," <u>Applied Surface Science</u> , Vol. 157, pp. 151-158 (2000).
✓9.	Won, Seok-Jun et al., "Conformal CVD-Ruthenium Process for MIM Capacitor in Giga-bit DRAMs," <u>IEEE, IED 2000, Session 34</u> (2000).
✓10.	Xu, P. et al., "A Breakthrough in Low-k Barrier/Etch Stop Films for Copper Damascene Applications," <u>Semiconductor Fabtech</u> , 11th Edition, p. 239 (2000).
✓11.	Yoon, Dong-Soo et al., "Investigation of RuO <sub>2</sub> -Incorporated Pt Layer as a Bottom Electrode and Diffusion Barrier for High Epsilon Capacitor Applications," <u>Electrochemical and Solid-State Letters</u> , Vol. 3, No. 8, pp. 373-376 (2000).

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EXAMINER	DATE CONSIDERED
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